



SOUTHERN CALIFORNIA
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IEPR Workshop
Southern California Reliability:
Transmission System Additions Panel

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SCE - Transmission Planning

Status of SCE's Major Transmission Projects

Project	Location	Status	Estimated Online Date
Coolwater-Lugo (220 kV T/L)	San Bernardino County	CPCN Application: <ul style="list-style-type: none"> • Filed Aug. 2013 • Amended Aug. 2014 Construction start: Q1 2016	Q2 2018
West of Devers Upgrade (220 kV T/L)	Riverside / San Bernardino Counties	CPCN Application: <ul style="list-style-type: none"> • Filed Oct. 2013 Construction start: Q1 2016	Q4 2019 / Q1 2020
Alberhill (500/115 kV Substation)	Lake Elsinore Area, Riverside County	CPCN Application: <ul style="list-style-type: none"> • Filed Sept. 2009 • Amended Mar. 2010 Construction start: TBD	Q4 2018
Santa Barbara County Reliability (66 kV)	Santa Barbara County	PTC Application: <ul style="list-style-type: none"> • Filed Dec. 2012 Construction start: TBD	Q3 2016
San Joaquin Cross Valley Loop (220 kV T/L)	Visalia Area, Tulare County	CPCN Application: <ul style="list-style-type: none"> • Filed May 2008 Construction in progress	Q4 2014

Mesa 500 kV Substation Project

Background:

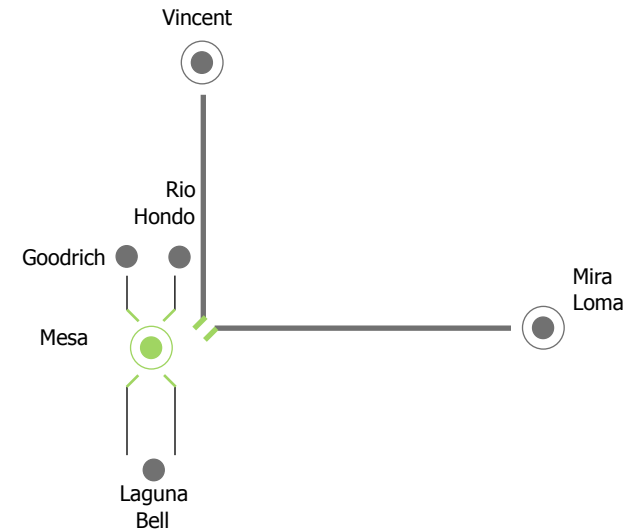
- CAISO approved the Mesa 500 kV Substation Project in their 2013-2014 Transmission Plan in order to:
 - Address bulk system reliability
 - Alleviate the increased overall loading on transmission facilities in the LA Metro area resulting from the retirement of SONGS and OTC generation as well as long term load growth in the LA Metro and San Diego areas.
 - Reduce the amount of local capacity needed to replace retired generation

Description:

- Expand SCE's existing Mesa 230/66/16 kV Substation to include 500 kV service.
- Loop in the Vincent-Mira Loma 500 kV, Laguna Bell-Rio Hondo 230 kV, and Goodrich-Laguna Bell 230 kV lines into the expanded Mesa Substation.

Status:

- Engineering and Environmental analysis underway
- Expected in-service date of 12/31/2020



OC Reactive Support – Santiago Substation

Background:

- 6/7/13 - SONGS unit 2 & 3 officially retired
- 2013-2014 TPP CAISO identified need for dynamic reactive support in the SONGS vicinity by 12/2017
 - SDG&E is to install a 225 MVAR synchronous condenser
 - SCE is to install a 225 MVAR synchronous condenser at the Santiago substation

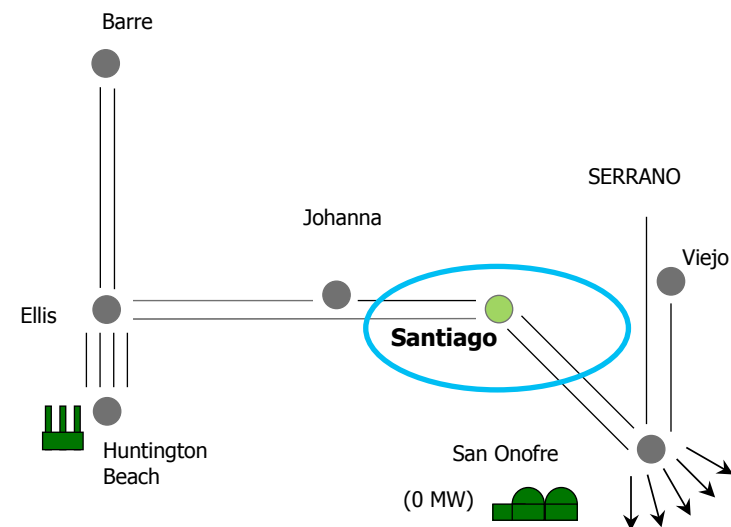
Description:

- By relocating existing facilities, the synchronous condenser can be positioned inside the 230 kV substation.

Status:

- Detailed engineering analysis underway
- In discussion with potential synchronous condenser vendors
- Currently on track to meet the in-service date of 12/2017

Santiago Substation (Irvine, CA)



Tehachapi Renewable Transmission Project

Background:

- Construct new high-voltage transmission facilities (500 and 230 kV) to connect the single largest wind generation régime in the United States
- Deliver 4,500 MW of predominately new wind generation resources to Californians

Status:

- Segment 6: Fully constructed and partially In-Service
- Segment 7: Under construction
- Segment 8: Under construction
 - SCE will begin construction of the underground portion in fourth quarter of 2014 -- estimated completion: June 2016
- Segment 11: Under construction with expected completion date May 2015

